



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Study Review for PMN 08-508/509

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I. INTRODUCTION

PMN substance 08-508, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid (CAS No. 13252-13-6, Figure 1), is a [REDACTED] with a molecular weight of 330, a boiling point of [REDACTED] (PMN submission), an estimated water solubility of 43 mg/L, and an estimated log K_{ow} of 8.12 (SAT Report).

PMN substance 08-509, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid ammonium salt (CAS No. 62037-80-3, Figure 1), is a [REDACTED] with a molecular weight of 347, it is dispersible in water (SAT Report).

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II. PHARMACOKINETICS IN MICE

Groups of 3 male and 3 female mice were dosed via single oral gavage with either 10 or 30 mg/kg of PMN substance 509 (). Blood samples were taken before dosing and at 0.25, 0.5, 1, 2, 4, 8, 12, 24, 48, 72, 96, 120, 144, and 168 hours after dosing. In addition fat and liver samples were taken at terminal sacrifice. Samples were analyzed for parent compound using HPLC/MS with a level of quantitation (LOQ) of 20 ng/mL (2008).

Clearance times for PMN substance 509 (time for clearance of 98.4% of the compound) were calculated:

	10 mg/kg	30 mg/kg
Male	143 h	139 h
Female	57 h	62 h

All fat samples and female rat liver samples were below the LOQ. Tissue (liver)/plasma ratio for male rats: 10 mg/kg = 0.5; 30 mg/kg = 0.5.

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REFERENCE

2008 (July 31). Biopersistence and Pharmacokinetic Screen in the Mouse [for PMN Substance ???].